



OWNER'S MANUAL

Model PP-18400CI

Portable Power Jump Starter/DC Power Source Air Compressor, Inflator and AC Power

**Includes 12V DC
Male-to-Male Charging Cord
For In-Vehicle Use**

CAUTION:

Read all Safety Rules and Operating Instructions,
and follow them with each use of this product.

Schumacher Electric Corporation
Mount Prospect, IL 60056 U.S.A.

Send Warranty Product Repairs to:

Customer Service Returns

P.O. Box 280, 1025 E. Thompson, Hoopeston, IL 60942-0280

Questions? Call Customer Service: 1-800-621-5485

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PLEASE SAVE THIS OWNER'S MANUAL AND READ BEFORE EACH USE.

Model PP-18400CI, Jump Starter/DC Power Source, Air Compressor and AC Power. This manual will explain how to use Model PP-18400CI safely and effectively. Please read and follow these instructions and precautions carefully.

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

**CHARGE THE PP-18400CI BEFORE THE FIRST USE AND
AFTER EVERY USE THEREAFTER.
USE IN A WELL-VENTILATED SPACE.
MUST BE DISPOSED OF PROPERLY.**

WARNING: POSSIBLE EXPLOSION HAZARD, CONTACT WITH BATTERY ACID MAY CAUSE SEVERE BURNS AND BLINDNESS. KEEP OUT OF REACH OF CHILDREN.

To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in vicinity of battery. Review cautionary markings on these products and on engine.

SAVE THESE INSTRUCTIONS

This manual contains important safety and operating instructions for the Portable Power model PP-18400CI.

WARNING: Handling the cord on this product or cords associated with accessories sold with this product, may expose you to lead, a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. ***Wash hands after handling.***

- **Do not** expose the Portable Power to rain or snow.

- **Never** touch the battery clamps together when the Portable Power is on. You could cause a spark and damage the internal battery.
- **Never** operate the Portable Power if it has received a hard blow, been dropped or otherwise damaged. Take it to a qualified professional for inspection and repair.

PERSONAL SAFETY PRECAUTIONS

- **Wear complete eye and clothing protection** when working with lead acid batteries. Always shield eyes during use and wear safety glasses.
- **Make sure** someone is within range of your voice or close enough to come to your aid when you are working near a lead-acid battery.
- **Have plenty of fresh water and soap** nearby in case battery acid contacts skin, clothing, or eyes. If this happens, wash immediately with soap and water. Then get medical attention.
- **Avoid touching your eyes** while working with a battery. Acid particles (corrosion) may get into your eyes. If acid enters the eye area, rinse with cold water for at least 10 minutes and get medical help immediately.
- **Remove all personal metal items** from your body such as rings, bracelets, necklaces and watches, while working with a lead-acid battery. A battery can produce a short circuit current high enough to weld a ring (or the like) to metal, causing a severe burn.

- **Take care** not to drop any metal tool or metal object onto the battery. This may spark or short circuit the battery or another electrical device that may cause an explosion.
- **Always** operate the Portable Power in an open, well-ventilated area.
- **Never** smoke, use matches or cigarette lighter or allow a spark or flame in the vicinity of the battery or engine. Batteries generate explosive gases.
- **Never** operate the Portable Power if it has damaged lead wire or clamps. If damaged, have the lead wire replaced by a qualified technician.
- **Do not permit internal battery to freeze.** Never charge a frozen battery.
- **Keep hands, hair, clothing and jewelry** clear of fan blades, belts, pulleys and other parts that may cause injury.

BEFORE USING THE PORTABLE POWER PP-18400CI

CHARGE INTERNAL BATTERY

After removing the PP-18400CI from the carton, charge it 48 – 72 hours before using even if the green CHARGING STATUS LED glows.

1. Make sure the PP-18400CI is OFF. The ON / OFF switch is located on the right side.
2. To charge, plug wall charger adaptor into the CHARGING ADAPTOR port on the right side, located under the ON / OFF switch.
3. Plug the wall charger plug into a 110 volt AC electrical wall outlet.

The green CHARGING STATUS LED located on the front panel will blink indicating there is power to PP-18400CI.

4. When the internal battery has reached full charge, the CHARGING STATUS LED will glow green. This could take up to 48 to 72 hours on some charges due to age and condition of the battery. The PP-18400CI will automatically drop into a float mode and maintain the internal battery at full charge without damaging battery.

OPERATING INSTRUCTIONS

JUMP-STARTING A VEHICLE ENGINE

NOTE: The inverter must be in the OFF (0) position before using the Jump Start feature.

1. Make sure the PP-18400CI is OFF. The ON / OFF switch is located on the right side.
2. Turn vehicle ignition OFF before making cable connections.
3. Rest the PP-18400CI on a flat, stable surface near the vehicle battery and away from moving engine parts.

CAUTION: To prevent sparking, NEVER allow clamps to touch together or to contact the same piece of metal.

4. Remove red and black clamps stored on the sides of the PP-18400CI.

5. Connect POSITIVE red clamp (+) to the POSITIVE terminal of the vehicle battery (Negative Ground System)*.
6. Connect NEGATIVE black clamp (-) to an unpainted and unmoving part of the vehicle chassis or engine block.

CAUTION: If you have connected the clamps backwards, an audible alarm will sound and the JUMP STARTER REVERSE HOOK-UP LED will turn on. Do NOT turn on PP-18400CI or serious damage could occur. Reverse the connections and the audible alarm will stop and the ON LED will turn off.

7. Turn ON the PP-18400CI.
8. Turn the key and crank the engine. If the engine does not start within 5 – 8

seconds, wait at least 1 minute before attempting to crank the vehicle again. This permits the internal battery to cool down.

9. After engine starts, turn OFF the PP-18400CI.
10. Disconnect clamps in this order: NEGATIVE black (-) and then POSITIVE red (+). Store clamps on each side of the case.
11. Charge the PP-18400CI as soon as possible after jump-starting.

***NOTE:** In the rare case of jump-starting a vehicle that has a positive-grounded vehicle electrical system, connect the NEGATIVE black clamp (-) to the negative terminal of the vehicle battery. Then connect the POSITIVE red clamp (+) to an unpainted and unmoving part of the vehicle chassis or engine block. If you are unsure of the nature of the vehicle's electrical grounding system, check the owner's manual of the vehicle. To disconnect clamps, reverse order.

POWERING A 12 VOLT DC DEVICE

The PP-18400CI is a power source for all 12 volt DC accessories equipped with a 12V accessory plug. Ideal for power outages, fishing excursions, camping trips, tailgating parties, etc. **Important:** Use accessories requiring no more than 15 amps. If the 12V DC device draws more than 15 amps, the circuit breaker will trip. If the circuit breaker trips, it will automatically reset.

To operate a 12V DC device:

1. Make sure the device to be powered is OFF.
2. Open the protective cover of the 12V DC power outlet on the front panel of the PP-18400CI.
3. Plug the 12V DC power cord of device into the 12V DC power outlet, and turn ON the 12V DC device (if needed).
4. Charge the PP-18400CI as soon as possible after each use.

NOTE: Because the DC power outlet is internally wired directly to the internal battery, extended operation of a 12V DC device may result in excessive battery drain.

12V DC ELECTRICAL DEVICE EXAMPLE RUN-TIME CHART

<u>Appliance Type</u>	<u>Estimated Wattage</u>	<u>Estimated Time*</u>
Fluorescent Lights, Cellular Phones	4 Watts	40 Hours
Radios, Depth Finders, Fans	9 Watts	21 Hours
Camcorders, DVD Players, Spotlights	15 Watts	12 Hours
Electrical Tools, Bilge Pumps	24 Watts	7 Hours
Electric Coolers	48 Watts	3 Hours
Air Compressors, Car Vacuums	80 Watts	1.5 Hours

***NOTE:** Estimated run-times. Actual time may vary. Times are based on the internal battery being fully charged.

USING THE AIR COMPRESSOR

CAUTION: Read instructions of the product being inflated before using the air compressor. The air compressor is rated 250 PSI. Avoid over inflation. Do NOT exceed the manufacturer's recommended pressures. Do NOT leave the air compressor unattended during use.

1. Remove air compressor hose wrapped in the back storage compartment.
2. To inflate a tire, attach the permanent nozzle connected to the end of the air compressor hose and attach to tire stem. Flip down lever.
3. To inflate items other than tires, use one of the three nozzles stored in the center back left compartment. Slide the panel to the left to open. Attach nozzle to end of air compressor hose, attach to product and flip down lever.

4. The 3-way air compressor ON switch is located on the back lower left side.

NOTE: There are two speeds of inflation: SLOW – push switch left (I) or FAST, push switch right (II). Inflate product and be careful to monitor the air pressure on air compressor gauge located on upper right back side. DO NOT OVER INFLATE.

5. When product is inflated to proper air pressure, turn OFF air compressor by pushing air compressor switch to OFF (O).
6. Remove nozzle and hose from product. Store hose and nozzles in their compartments.

NOTE: Do not run for more than 10 minutes maximum at a time. If you do, allow the PP-18400CI to cool down for 10 minutes before using again. If the compressor overheats, the built-in thermal protection will turn the PP-18400CI off. Wait a few minutes and it will automatically restart.

ESTIMATED TIME FOR INFLATING

Vehicle Tires	
13" to 16"	6 to 24 minutes
Bike Tire	1 to 3 minutes
Sports Balls	30 seconds

USING THE BUILT-IN SWIVEL LIGHT

The built-in swivel light is located on the left side of the back of the PP-18400CI. With a fully charged internal battery, the built-in light should provide 18 to 26 hours of continuous useful light, depending on ambient conditions.

1. Position the PP-18400CI on a flat, stable surface near the intended work area.
2. Pull tab up to remove light from storage. Turn light in direction needed.
3. To turn light ON, push red button in back of light. The light and green LED will light.
4. To turn OFF, push red button. The light and green LED will turn off.
IMPORTANT: Turn off light before placing light in its storage space otherwise battery drain occurs.
5. Charge PP-18400CI as soon as possible after using built-in light.

REPLACING THE BUILT-IN SWIVEL LIGHT BULB

1. Turn light off.
2. Pop out protective plastic lens cover.
3. Gently grasp the bulb and twist until notch in bulb lines up with retaining tab.
4. Insert a replacement bulb of same type and rating, and twist clockwise one quarter-turn to screw in new bulb.
5. Test light by switching light on and off.
6. Replace lens cover.

IMPORTANT SAFETY INSTRUCTIONS

NOTE: The JUMP START switch must be in the OFF position before using the inverter.

- The PP-18400CI comes with an internal inverter. It must be well ventilated in order to properly disperse heat while it is in use. Make sure there are several inches of clearance around the top and sides of the PP-18400CI. DO NOT block the vents on the back of the PP-18400CI.
- Make sure the PP-18400CI is not close to any potential source of flammable fumes, gases or clothing.
- Keep the PP-18400CI dry.
- DO NOT allow the PP-18400CI to come into contact with rain or moisture.
- DO NOT operate the PP-18400CI if you, the PP-18400CI, the device being operated or any other surfaces that may come in contact with any power source are wet. Water and many other liquids can conduct electricity, which may lead to serious injury.
- Do not place the PP-18400CI on or near heating vents, radiators or other sources of heat.
- Do not place the PP-18400CI in direct sunlight.
- The ideal air temperature for operation is between 50° and 80°F.
- Do not use inverter near open engine compartment.
- Do not modify the AC receptacles in any way.

USING THE INVERTER

It is important to know the continuous wattage of the device you plan to use with the inverter. The PP-18400CI must be used with devices drawing 400 watts or less. If the wattage is not marked on the device, an estimate can be made by multiplying the AC input current (Amps) by the AC voltage (110V).

Devices like TVs, fans or electric motors require additional power to start (commonly known as the “starting or peak power”). The PP-18400CI can supply a momentary surge in wattage; however, even devices rated less than the maximum 400 watts can exceed the inverters surge capability and cause an automatic overload shutdown.

Make sure the device you are using is compatible with a modified sine wave inverter.

CAUTION: Always run a test to establish whether the inverter will operate a particular piece of equipment or device.

NOTE: In the event of a power overload, the inverter is designed to automatically shut down. This safety feature prevents damaging the inverter while testing devices and equipment with the 400-watt range.

IMPORTANT: When powering two-110 volt AC accessories, the combined watts should not exceed 400 watts.

POWERING A 110V AC DEVICE

There are two-110 volt AC POWER outlets located on the front panel.

To operate a 110 volt AC device:

1. Make sure the device to be powered is OFF.
2. Plug the 110V AC device power cord into a AC POWER outlet located on the front panel. Push the INVERTER switch located on left side of front panel to ON (I). The digital display will show \square .
3. Turn ON the 110V AC device. The digital display will show the draw of watts from device plugged in.
4. If a device will not operate properly when first connected to the inverter,

push the INVERTER rocker switch ON (I), OFF (O), and ON (I) again in quick succession. If this procedure is not successful, it is likely the PP-18400CI inverter does not have the required capacity to operate the device(s) in question. Make sure the wattage does not exceed 400.

5. Turn OFF (O) the INVERTER switch when finished.
6. Charge the PP-18400CI as soon as possible after each use.

CAUTION: Incorrect operation of your inverter may result in damage and personal injury. Electrical current on a 110 volt circuit can be very dangerous.

110V AC ELECTRICAL DEVICE EXAMPLE RUN-TIME CHART

<u>Appliance Type</u>	<u>Estimated Wattage</u>	<u>Estimated Time*</u>
Spotlights, Sump Pumps, DVD Players	100 Watts	1.3 Hours
Faxes, TVs, Small Power Tools	150 Watts	50 Minutes
Computer Printer, Medium Power Tools, Blenders	200 Watts	40 Minutes

The maximum continuous load is 400 watts.

***NOTE:** Estimated run-times. Actual time may vary. Times are based on the internal battery being fully charged.

TROUBLESHOOTING THE INVERTER

1. Alarm sounds, and device plugged in shuts off.

Continuous load demand or wattage exceeds 400 watts. Push INVERTER switch to the OFF (O) position.

Determine source of problem, and resolve it before reusing the inverter.

2. The Alarm Sounds.

Voltage from the internal battery drops to approximately 10.5 volts. When the power input drops to approximately 11 volts an alarm will sound for an extended period.

3. Inverter shuts down.

The PP-18400CI inverter temperature exceeds 145° F.

NOTE: The PP-18400CI is fitted with a cooling fan that runs continuously for loads drawing 25 watts or higher. If cooling fan is unable to maintain a cool enough temperature for safe operation, inverter will automatically shut down. If inverter automatically shuts down or a continuous audible alarm is heard, push INVERTER switch to the OFF (O) position. Determine source of problem, and resolve it before reusing the inverter.

DIGITAL DISPLAY FUNCTIONS

1. PP-18400CI – To check the internal battery's status, press the DISPLAY button on the front of the PP-18400CI. The display will show the voltage of the internal battery.
2. When hooked up to the vehicle's battery, the digital display shows the combined vehicle's voltage and the PP-18400CI's internal battery voltage.
3. AC Power – When using the PP-18400CI inverter, the digital display shows the wattage and voltage of the device being powered. Push the DISPLAY button to read wattage or push DISPLAY button again to read voltage. The internal battery is specifically designed to deliver high power jump-starting as well as repetitive deep cycling performance.

CHARGING INTERNAL BATTERY

NOTE: Internal battery's status DISPLAY is most accurate when the Portable Power PP-18400CI has been disconnected from all devices and charging sources for at least 30 minutes. The DISPLAY feature will not work when the Portable Power is being charged.

CAUTION: Operating the Portable Power PP-18400CI while the internal battery is being charged may cause permanent damage to the PP-18400CI.

1. To check the internal battery's charge level, press the DISPLAY button. The Digital Display will show the battery's voltage.
2. To charge, follow instructions CHARGE INTERNAL BATTERY on page 4.
3. Once the battery is fully charged, the built-in charger automatically switches to float-mode monitoring, which trickle charges the battery and keeps it fully charged without overcharging so the PP-18400CI may be left permanently connected to the electrical wall outlet.

USING THE MALE-TO-MALE CHARGING CORD

The internal battery may also be charged while you drive by using the male-to-male accessory cable (included).

1. Make sure the PP-18400CI is OFF.
2. Insert one end of the male charging cord into the PP-18400CI's 12V DC power outlet and the other end into the vehicle's accessory outlet (lighter socket). **Important:** Disconnect power cord from the PP-18400CI and the vehicle's accessory outlet when engine is not running.

STORAGE AND MAINTENANCE

Charge the PP-18400CI internal battery before first use and after every use thereafter. The internal battery will gradually self-discharge (lose power) over time, especially in warm environments. Leaving the battery in a discharged state may result in permanent battery damage. To ensure satisfactory performance and avoid permanent damage, charge the internal battery every 2 to 3 months. The PP-18400CI may be left permanently connected to the AC electrical wall outlet. Store in a cool dry place.

SPECIFICATIONS

Internal Battery Type	Maintenance-free AGM Lead-acid
Nominal Voltage	12 Volt DC
Capacity	18 Ah
DC Power Outlet	15A
Built-in Light Bulb (Replaceable)	2.5w/12v DC
Jumper Cables	Heavy Duty 24 Inch
Dimensions (H X W X D)	12 H X 11.5 X 10.5 Inches
Product Weight	24.5 Lbs.

AC POWER SPECIFICATIONS

Maximum Continuous Power 400 Watts
Surge Capacity (Output Wattage) 800 Watts
No Load Current Draw <0.4 Amps
Wave Form Modified Sine Wave
Input Voltage Range 10.5 – 15.5V DC
AC Outlets Two, 110V AC 3-Prong grounded

LIMITED WARRANTY

Schumacher Electric Corporation warrants your unit to be free from defects in material and workmanship, excepting abuse or misuse, for a period of one year from the date of sale to the original user or consumer purchaser. If your unit fails or malfunctions within the first 30 days of the warranty, we will replace it with a new unit. If your unit malfunctions or fails within the 12 month warranty period because of a defect in material or workmanship, we will repair without charge.

The internal battery, excluding units with swollen batteries or melted battery terminals, carries a 90-day warranty from the date of purchase. Proof of purchase required. All battery replacements will be at the sole discretion of the manufacturer or his designated agents.

This warranty is in lieu of all other express warranties. The duration of any implied warranty, including but not limited to any implied warranty of merchantability or fitness for a particular purpose, made in respect to your unit is limited to the period of the express warranty set forth above.

For warranty service, return your product, with proof of purchase, to the factory or a designated agent:

Schumacher Electric Corporation
Warranty Service Department
1025 E. Thompson Street, PO Box 280
Hoopeston, IL 60942

Phone 1-800-621-5485

Customer Service hours: 7 AM to 4 PM CST.

You will be responsible for all insurance and freight or other transportation charges to the factory or point of repair. We will return your unit freight prepaid if repair is covered under warranty. Your unit should be properly packed to avoid damage in transit, since we will not be responsible for any such damage.

In no event shall Schumacher Electric Corporation be liable for consequential or incidental damages. Some states do not allow limitations on the length of the implied warranty or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.



801 Business Center Drive, Mount Prospect, IL 60056-2179

Send Warranty Product Repairs to: Schumacher Electric Corporation,
1025 East Thompson, Hoopeston, IL 60942-0280.
Call Customer Service if you have questions: 1-800-621-5485.



CONTAINS SEALED NON-SPILLABLE LEAD-ACID BATTERY.
MUST BE DISPOSED OF PROPERLY.

WARNING: Possible explosion hazard. Contact with battery acid
may cause severe burns and blindness. Keep out of reach of
children.